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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

RODRIGUEZ, RUTH C

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,908

Applicant(s)

SAKABAYASHI, TOSHIKI

Examiner

Ruth C Rodriguez

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-25 is/are allowed.
- 6) ☒ Claim(s) 8-11 and 16 is/are rejected.
- 7) ☒ Claim(s) 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/16/03.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species I - Figures 1-4

Species II - Figures 5-8.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Jeffrey R. Filipek on 20 October 2004 a provisional election was made without traverse to prosecute the invention of Species II, claims 8-25. Affirmation of this election must be made by applicant in replying to this Office action.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rotational member is located between the operating member and the fastening member must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. For

purpose of examination, the Examiner is assuming that the claim should be that the rotational member is located between the driving mechanism and the fastening member.

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the internal gear of the cap is moved in order to disengage from the external gear of the rotational member while being retained by the hexagonal shaft as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 8-11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Morell et al. (US 4,633,599).

A shoestring tying apparatus comprises a fastening member (15,68), a rotational member (68), a fitting portion (43) and a driving mechanism (81). The fastening member tightens a shoestring (Figs. 1-3). The fastening member includes a disk (15) connected to one end of the shoestring and an operating member (68) rotates the disk so as to wind the shoestring (Figs. 1-3). The rotational member engages the fastening member and rotates the operating member of the fastening member in a winding direction so as to wind the shoestring around the disk when the rotational member is rotated in a predetermined direction to thereby tighten the shoestring (Figs. 1-3). The rotational member engages the fastening member and prevents rotation of the operating member of the fastening member in a direction opposite the winding direction when rotation of the rotational member is stopped, thereby maintaining tension of the shoestring (Figs. 1-3). The rotational member disengages the fastening member to allow rotation of the operating member of the fastening member in the direction opposite the winding direction to thereby releasing the tension of the shoestring (C. 10, L. 40-66).

The fitting portion connects the rotational member to the operating member of the fastening member (Figs. 1-3). The driving mechanism rotates the rotational member in the predetermined direction (Figs. 1-3). The driving mechanism manually or automatically rotates the operating member via the rotational member so as to rotate the disk of the fastening member to thereby tightening the shoestring (Figs. 1-3).

The fitting portion is integrally connected to the rotational member such that the fitting portion and the rotational member have a one-piece construction (Figs. 1-3). The fitting portion has a contact surface (44) for contacting a contact surface (73) of the operating member (Figs. 1-3).

The fitting portion comprises an external gear (44). The operating member has an internal gear (73) engaging the external gear integrally connected to the rotational member (Figs. 1-3).

The rotational member is located between the drive means and the fastening member (Figs. 1-3).

7. Claims 8-10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bidoia (US 4,961,544).

A shoestring tying apparatus comprises a fastening member (25,32), a rotational member (29,33), a fitting portion (29) and a driving mechanism (37). The fastening member tightens a shoestring (Figs. 6-10). The fastening member includes a disk (25) connected to one end of the shoestring and an operating member (32) that rotates the disk so as to wind the shoestring. The rotational member engages the fastening member and rotates the operating member of the fastening member in a winding

direction so as to wind the shoestring around the disk when the rotational member is rotated in a predetermined direction to thereby tighten the shoestring (Figs. 6, 8 and 10). The rotational member engages the fastening member and prevents rotation of the operating member of the fastening member in a direction opposite the winding direction when rotation of the rotational member is stopped, thereby maintaining tension of the shoestring (Figs. 6, 8 and 10). The rotational member disengages the fastening member to allow rotation of the operating member of the fastening member in the direction opposite the winding direction to thereby releasing the tension of the shoestring (Fig. 9). The fitting portion connects the rotational member to the operating member of the fastening member (Figs. 6-10). The driving mechanism rotates the rotational member in the predetermined direction (Figs. 6-10). The driving mechanism manually or automatically rotates the operating member via the rotational member so as to rotate the disk of the fastening member to thereby tightening the shoestring (Figs. 6-10).

The fitting portion is integrally connected to the rotational member such that the fitting portion and the rotational member have a one-piece construction (Figs. 6-10). The fitting portion has a contact surface for contacting a contact surface of the operating member (Figs. 6-10).

The rotational member is located between the driving mechanism and the fastening member (Figs. 6-10).

Allowable Subject Matter

8. Claims 17-25 are allowed.

9. Claims 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

11. For claim 12, Morell discloses a shoestring tying apparatus having all the features disclosed above in paragraph 5 for the rejection of claim 8. The driving mechanism disclosed by Morell is a knob (81). Morell fails to disclose that the driving mechanism comprises a cylindrical storage member, an elastic member, an operating cord and a restricting device. Accordingly, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to replace the knob disclosed by Morell as the driving mechanism for a cylindrical storage member, an elastic member, an operating cord and a restricting device. Bidoia also discloses that the driving mechanism is a knob.

12. Regarding claim 17, Morell discloses a shoestring tying apparatus having all the limitations listed above in paragraph 5 for the rejection of claim 8. Additionally, Morell also discloses that the rotational member includes a cylindrical portion and a rotational shaft with an elastic member in the cylindrical portion and a two-piece cover member. However, Morell fails to disclose that the shoestring tying apparatus further comprises a

ratchet in the cylinder portion, an operating cord to be wound on the cylinder portion, that the elastic member has a first end fixed to the rotating shaft of the rotational member and that the cover member stores the operating cord. Consequently, it would not have been obvious to one having ordinary skill in the art at the time of applicant's invention to modify the apparatus disclosed by Morell with a ratchet in the cylinder portion, an operating cord to be wound on the cylinder portion, having the elastic member with a first end fixed to the rotating shaft of the rotational member and having the cover member stores the operating cord.

13. For claim 19, Morell discloses a shoestring tying apparatus having all the features disclosed above in paragraph 5 for the rejection of claim 8. In addition to the features added in claim 17 that were not disclosed by Morell, claim 19 also include a plurality of pawls, the ratchet that has pawl-storage sections and a spring storage member that are not disclosed by Morell. As a result, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to have the shoestring tying apparatus having the features disclosed by Morell with a plurality of pawls, the ratchet that has pawl-storage sections and a spring storage member in addition to the features missing from Morell as defined by claim 17.

14. Regarding claim 24, Morell discloses a shoestring tying apparatus having all the limitations listed above in paragraph 5 for the rejection of claim 8. Morell disclose that the rotational member includes an internal gear. However, Morell fails to disclose that the rotational member has an engaging gear, the operating member has a plurality of pawls, a cylindrical engaging gear and a gear set, a ratchet engaging the gear set and

an operating cord. As a result it would not have been obvious to one having ordinary skill in the art at the time of applicant's invention to have the rotational member with an engaging gear, the operating member with a plurality of pawls, a cylindrical engaging gear and a gear set, a ratchet engaging the gear set and an operating cord.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Baggio et al. (US 4,799,297), Bidoia (US 4,961,544) and Schoch (US 5,042,177) are cited to show state of the art with respect to shoestring tying apparatus having some of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (703) 308-1881. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase the patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such

submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as PTO's mailroom processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP § 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee that the applicant is paying by check **should not be** submitted by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP § 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office (Fax No. (703) 872-9306) on (Date) .

(Typed or printed name of person signing this certificate)

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP § 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response has been transmitted by facsimile will cause further unnecessary delays in the processing of your application, duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcr

December 6, 2004



ROBERT J. SANDY
PRIMARY EXAMINER